

ABSTRACT OF THE DISCLOSURE

5 Provided are a method, computer program product and system for providing indexed queue support for efficient retrieval of messages from a queue. An index key for expediting message retrieval is assigned to a message when the operation of placing the message on a queue is committed. The index assigned at commit time comprises an attribute (such as a message ID or correlation ID) specified by the sending application program which placed the message on the queue. This deferred assignment of an index key until commit time means that the index key can be used to search for messages having the particular attribute without any possibility of identifying messages for retrieval before the messages have been committed. This maintains transactional requirements of a transaction-oriented messaging system which requires a message to only be made available for retrieval by receiver application programs after the sender application's put operation has committed, and is more efficient than a solution in which a message is made visible on a queue using a searchable index assigned at Put time but is locked until commit time. The invention also provides for

efficient monitoring of message availability in response to retrieval requests which specify a wait option.

1. The first step is to identify the problem. This involves understanding the current situation and the goals that need to be achieved.